(c) whether the similar expertise exists in Europe, US space organizations, and whether there are arrangements for interaction between ISRO and other foreign based organizations?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) ISRO has built a number of satellites for weather, earth imaging, telecommunication, broadcasting, etc. which are extensively used by national agencies. A part of the capacity relating to telecommunication and broadcasting is being leased to Indian Corporate Houses on commercial basis.

(b) Yes, Sir. ISRO, through its commercial arm ANTRIX Corporation, has bagged commercial contracts to build two communication satellites for European customers.

(c) European and US aerospace industries have expertise to build commercial satellites. Antrix Corporation, the commercial arm of ISRO, has entered into a Memorandum of Agreement with EADS Astrium—a leading global satellite manufacturer based in Europe-to jointly manufacture and market communication satellites for the global market.

Space Odyssey

1753. SHRI RAJKUMAR DHOOT: Will the PRIME MINSTER be pleased to state:

(a) whether it s a fact that India has planned a space odysey by placing a man on the moon in 2008;

(b) if so, the details thereof;

(c) whether it will be an indigenous venture or foreign collaborated effort;

(d) if so, the details thereof; and

(e) the amount of money involved in this venture and the benefits expected to be derived therefrom?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) and (b) There is no proposal for placing a man on the moon in 2008. However, it is planned to launch an instrumented spacecraft—Chandrayaan-1 in the year 2008 to orbit around the Moon. The approved cost of this mission is Rs 386 crores. The objectives of this indigenous mission include high resolution imaging of

lunar terrain and mapping of various chemicals and mineralogical constituents over its surface.

(c) to (e) Do not arise.

Percentage of ISRO Budget

1754. SHRIMATI MOHSINA KIDWAI: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that ISRO is planning a reusable launch vehicle, which will speed into space like a rocket but will return to runway like an aircraft;

(b) if so, whether the technology on which, if designed, result in substantial cost reduction;

(c) whether the capability been developed on the basis of R&D efforts in vogue in the ISRO; and

(d) the percentage of ISRO budget that is being spent on R&D and does it require any augmentation?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) Yes, Sir. As a first step towards realisation of resuable Launch Vehicle, a number of investigative and flight demonstration studies in the areas of re-entry and recovery of space modules, air-breathing propulsion and winged body hypersonic flight technology demonstration missions have been taken up.

(b) Yes, Sir. Use of Reusable Launch Vehicles in the future is expected to substantially reduce the cost of access to space.

(c) This reusable technology is being developed through indigenous efforts.

(d) 70% of ISRO budget is spent on R&D. ISRO augments its R&D spending through annual plans based upon its programmatic targets.

Jawaharlal Nehru National Urban Renewal Mission

†1755. SHRI MANGANI LAL MANDAL: Will the Minister of URBAN DEVELOPMENT be pleased to state:

(a) the objective of announcing Jawaharlal Nehru National Urban Renewal Mission (JNNURM) and the ways of achieving its objectives;

† Original notice of the question was received in Hindi.